

### **REMARKS**

Claims 1-9, and 13-14 are pending in this application. Claims 3, 6, and 9 have been withdrawn from consideration. Accordingly, claims 1, 2, 4, 5, 7, 8, 13 and 14 are before the Examiner.

#### **Election/Restrictions**

Applicants note with appreciation the examiner's acknowledgement of the election of group I, where  $a = b = c = 1$ . Claims 3, 6 and 9 have been withdrawn from consideration as drawn to non-elected invention. Applicants note the restriction is made final and respectfully reserve their right to petition the requirement.

#### **35 U.S.C. § 112**

##### **First paragraph**

Claim 13 stands rejected under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the enablement requirement.

How to Make: The action alleges the specification is not enabling for making compounds where  $a = b = c = 1$ , i.e. octanes. The Action alleges that "the elected invention of substituted 1,4-diazabicyclo[3.2.1]octane compounds of formula (I), where  $a$  is 1,  $b$  is 1, and  $c$  is 1 of which the applicants have neither support or contemplated." The specification provides a scheme for making compounds in accordance with the invention. Notably, beginning on page 6, the scheme calls for starting compound III, which when  $a = b = c = 1$  corresponds to an octane. The Action appears to focus on several examples that are drawn to nonanes ( $a$  is 1,  $b$  is 2,  $c$  is 1), and concludes that octanes have no support. Applicants respectfully disagree.

When III is an octane, the scheme provided in the Specification fully enables octane compounds of the elected invention. Applicants submit herewith an article describing the preparation of 1,4-diazabicyclo[3.2.1]octane from 2-piperazin-2-yl-ethanol. (see P.A. Stern et al. (J. Med. Chem.) 20 (10), 1977, 1333-1337). Thus, those of skill in the art would be aware of methods for producing the starting material 1,4-diazabicyclo[3.2.1]octane, i.e. a = b = c = 1. Thus, the specification is enabling with respect to how to make compounds of formula (I) where a is 1, b is 1, and c is 1.

How to Use: The rejection appears to be directed at the inclusion of the phrase "human disease or conditions in which activation of the  $\alpha 7$  nicotinic receptor is beneficial." Although Applicants believe this phrase is adequately described, we have deleted it from the claims as an administrative expedient.

The rejection appears further to be directed to the use of "prophylaxis." In an effort to advance prosecution, Applicants have deleted the term from the claim.

Applicants respectfully submit that claim 13 now satisfies all requirements of 35 U.S.C. § 112. Withdrawal of the rejection is respectfully requested.

#### **Claims Rejections – 35 U.S.C. § 102**

Claims 1, 2, 4, 5, 7, 8 and 14 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent no. 3,281,423 (Becker et al.) Applicants have amended independent claim 1 to overcome the rejection. Accordingly, claim 1 and claims dependent therefrom are now allowable over the cited reference.

#### **Claim Rejections – 35 U.S.C. § 103**

Claims 1, 2, 4, 5, 7, 8, 13, and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Peters et al. US patent application publication 2006/0148789. Applicants respectfully submit that the rejection should be withdrawn, since Peters '789 is not available as prior art to the present application.

Peters '789 was filed as a PCT application on February 4, 2004 claiming priority to 2 US provisional applications and 2 foreign patent applications. The earliest priority date claimed is February 27, 2003. Peters '789 was published on July 6, 2006. Since the publication date of Peters '789 is after Applicants' filing date, Peters '789 is not available as prior art under either 102(a) or 102(b). Furthermore, Peters '789 is not available as prior art, because Applicants' priority date, August 14, 2002, predates even the earliest priority date of Peters '789. Applicants respectfully request withdrawal of the rejection, since Peters '789 is not available as prior art.

### **Double Patenting**

Claims 1, 2, 4, 5, 7, 8, 13, and 14 1-4, 6-11, 14, 19 and 20 stand provisionally rejected for obviousness type double patenting over claims 1-4, 6-11, 14, 19 and 20 of co-pending application no 10/524,484. There is a similar obviousness type double patenting rejection in the '484 application. The '484 application and its prosecution history are being cited in the enclosed Information Disclosure Statement in satisfaction of our duty of candor under 35 U.S.C. § 1.56.

Claims 1, 2, 4, 5, 7, 8, 13, and 14 stand provisionally rejected for obviousness type double patenting over claims 1-19 of co-pending application no 10/283,576. To date, there has been no action on the merits in the '576 application. The '484 application and its prosecution history are being cited in the enclosed Information Disclosure Statement in satisfaction of our duty of candor under 35 U.S.C. § 1.56.

Applicants have also noted co-pending application serial no. 10/in the enclosed IDS.

Applicants respectfully request that these Obviousness-type Double Patenting rejections be held in abeyance until the present claims are otherwise indicated as allowable. At that time, Applicants will consider the filing of a terminal disclaimer, if necessary and appropriate.

The Commissioner is hereby authorized to charge any fee or underpayment thereof or credit any overpayment to deposit account no. 26-0166.

Early reconsideration and allowance of all pending claims is respectfully requested. The examiner is requested to contact the undersigned attorney if an interview, telephonic or personal, would facilitate allowance of the claims.

Respectfully submitted,

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